

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A laser-based device comprising:
a VCSEL-type laser having an active side and a passive side opposite the active side; and
a photodetector unit on the passive side, the photodetector unit comprising
an absorbing region located so as to receive leakage photons exiting the laser through
the passive side, and
a Schottky contact having a first portion abutting the absorbing region and through
which a current, caused by absorption of the leakage photons in the absorbing, can be measured and
a substrate located between a second portion of the Schottky contact and the absorbing region.
2. (original) The device of claim 1 further comprising:
a substrate abutting the active side.
3. (original) The device of claim 2 wherein the substrate comprises:
an access way over at least a portion of the active side so that, when the laser emits light
through the active side, the emission will pass through the access way.
4. (original) The device of claim 1 wherein the absorbing region comprises
a substrate on which the laser was grown.
5. (cancelled)
6. (original) The device of claim 1 wherein the laser is a top emitting laser.

7. (original) The device of claim 1 wherein the laser is a bottom emitting laser.
8. (original) The device of one of claims 1 through 7 further comprising:
an electronic circuit chip hybridized to the laser.
9. (original) The device of claim 8 further comprising:
a planarizing dielectric located between at least a portion of the electronic circuit chip and
the laser.
10. (original) The device of one of claims 1 through 7 wherein the active side comprises an
active side mirror and wherein the active side mirror is doped so as to be p-type.
11. (original) The device of one of claims 1 through 7 wherein the active side comprises an
active side mirror and wherein the active side mirror is doped so as to be n-type.
12. (original) The device of claim 1 wherein the absorbing region is a semi-insulating
material.
13. (original) The device of claim 12 wherein the semi-insulating material comprises:
Gallium Arsenide.
14. (original) The device of claim 12 wherein the semi-insulating material is less than two
microns in thickness.
15. (original) The device of claim 12 wherein the semi-insulating material is about 1
micron in thickness.

16. (original) The device of one of claims 1 through 7 wherein the active side comprises an active side mirror and wherein the active side mirror comprises at least one of a carbon dopant, a berrilium dopant or a zinc dopant.

17. (original) The device of claim 16 wherein the active side mirror comprises:
AluminumGalliumArsenide.

18. (original) The device of one of claims 1 through 7 wherein the passive side comprises a passive side mirror and wherein the passive side mirror comprises at least one of a silicon dopant or a tellurium dopant.

19. (original) The device of claim 18 wherein the active side mirror comprises:
AluminumGalliumArsenide.

Claims 20-24 (cancelled)